



Eastern Research Group
601 Keystone Park Drive
Suite 700
Morrisville, NC 27560

February 25, 2019

Ms. Doris Chen & Lewis Weinstock
U.S. Environmental Protection Agency - OAQPS
109 T.W. Alexander Drive, Mail Code: C304-06
RTP, NC 27709
Project Name: EtO Region 5

Dear Ms. Doris Chen & Lewis Weinstock,

This report contains the analytical results for the sample(s) received under chain(s) of custody by Eastern Research Group on 02/14/19 11:08.

The test results in this report are in compliance with NELAC accreditation requirements for the certified parameters. All analyses were performed as described in the US EPA-approved QAPP, under the contract for UATMP, NATTS, CSATAM, PAMS and NMOC support (US EPA Contract No. EP-D-14-030). This cover page is an integral part of this report, and any exceptions or comments are noted on the last page.

Release of the data contained in this data package and in the data submitted in the electronic data deliverable, has been authorized by the Program Manager, or the Program Manager's designee as verified by the following signature.

The issuance of the final Certificate of Analysis takes precedence over any previous Report. If you have any questions, please contact me at 919-468-7924.

Sincerely,

Julie Swift
Program Manager
julie.swift@erg.com

The information contained in this report and its attachment(s) are intended only for the use of the individual to whom it is addressed and may contain information that is privileged, confidential, or exempt from disclosure. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this report is strictly prohibited. If you have received this report in error, please notify julie.swift@erg.com and delete the report without retaining any copies.



CERTIFICATE OF ANALYSIS

U.S. Environmental Protection Agency - OAQPS

109 T.W. Alexander Drive, Mail Code: C304-C

RTP, NC 27709

ATTN: Ms. Doris Chen & Lewis Weinstock

PHONE: (919) 541-4957 **FAX:** -

FILE #: 0344.00

REPORTED: 02/25/19 07:54

SUBMITTED: 02/14/19

AQS SITE CODE:

SITE CODE: EtO Region 5

ANALYTICAL REPORT FOR SAMPLES

<u>SampleName</u>	<u>LabNumber</u>	<u>Matrix</u>	<u>Sampled</u>	<u>Received</u>
Gower ES	9021401-01	Air	02/12/19 10:01	02/14/19 11:08
Gower MS	9021401-02	Air	02/12/19 09:32	02/14/19 11:08
WB Village Hall C1	9021401-03	Air	02/12/19 09:24	02/14/19 11:08
WB Village Hall C2	9021401-04	Air	02/12/19 09:24	02/14/19 11:08
Willow Pond Park	9021401-05	Air	02/12/19 09:48	02/14/19 11:08
Water Tower	9021401-06	Air	02/12/19 09:40	02/14/19 11:08
West Neighborhood	9021401-07	Air	02/12/19 10:06	02/14/19 11:08
Hinsdale South HS	9021401-08	Air	02/12/19 09:54	02/14/19 11:08
WB Warehouse	9021401-09	Air	02/12/19 09:17	02/14/19 11:08

Eastern Research Group

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FILE #: 0344.00

REPORTED: 02/25/19 07:54

SUBMITTED: 02/14/19

AQS SITE CODE:

SITE CODE: EtO Region 5

Description: Gower ES

Lab ID: 9021401-01

Sampled: 02/12/19 10:01

Pressure @ Receipt: 4.50" Hg

Canister #: 077

Received: 02/14/19 11:08

Comments: Probe # 10293 Start 10:39 2/11/19

Analyzed: 02/16/19 05:36

Air Toxics by EPA Compendium Method TO-15

<u>Analyte</u>	<u>Results</u>		<u>Flag</u>	<u>MDL</u>
	<u>ppbv</u>	<u>ug/m³</u>		<u>ppbv</u>
Ethylene oxide	0.220	0.40	LK	0.0453

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FILE #: 0344.00

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SUBMITTED: 02/14/19

AQS SITE CODE:

SITE CODE: EtO Region 5

Description: Gower MS

Lab ID: 9021401-02

Sampled: 02/12/19 09:32

Pressure @ Receipt: 2.50" Hg

Canister #: 707

Received: 02/14/19 11:08

Comments: Probe #10311 Start 9:52 2/11/19

Analyzed: 02/16/19 06:38

Air Toxics by EPA Compendium Method TO-15

<u>Analyte</u>	<u>Results</u>		<u>Flag</u>	<u>MDL</u>
	<u>ppbv</u>	<u>ug/m³</u>		<u>ppbv</u>
Ethylene oxide	0.0630	0.11		0.0453

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FILE #: 0344.00

REPORTED: 02/25/19 07:54

SUBMITTED: 02/14/19

AQS SITE CODE:

SITE CODE: EtO Region 5

Description: WB Village Hall C1

Lab ID: 9021401-03

Sampled: 02/12/19 09:24

Pressure @ Receipt: 4.50" Hg

Canister #: 3639A

Received: 02/14/19 11:08

Comments: Col 1 Probe #10313 Start 9:29 2/11/19

Analyzed: 02/16/19 01:33

Air Toxics by EPA Compendium Method TO-15

<u>Analyte</u>	<u>Results</u>		<u>Flag</u>	<u>MDL</u>
	<u>ppbv</u>	<u>ug/m³</u>		<u>ppbv</u>
Ethylene oxide	2.20	3.97		0.0453

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FILE #: 0344.00

REPORTED: 02/25/19 07:54

SUBMITTED: 02/14/19

AQS SITE CODE:

SITE CODE: EtO Region 5

Description: WB Village Hall C2

Lab ID: 9021401-04

Sampled: 02/12/19 09:24

Pressure @ Receipt: 2.00" Hg

Canister #: A22228

Received: 02/14/19 11:08

Comments: Col 2 Probe # 10315 Start 9:29 2/11/19 >3 inch Hg differenc

Analyzed: 02/16/19 02:33

Air Toxics by EPA Compendium Method TO-15

<u>Analyte</u>	<u>Results</u>		<u>Flag</u>	<u>MDL</u>
	<u>ppbv</u>	<u>ug/m³</u>		<u>ppbv</u>
Ethylene oxide	2.61	4.71		0.0453

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FILE #: 0344.00

REPORTED: 02/25/19 07:54

SUBMITTED: 02/14/19

AQS SITE CODE:

SITE CODE: EtO Region 5

Description: Willow Pond Park

Lab ID: 9021401-05

Sampled: 02/12/19 09:48

Pressure @ Receipt: 4.00" Hg

Canister #: 711

Received: 02/14/19 11:08

Comments: Probe # 10294 Start 10:16 2/11/19

Analyzed: 02/20/19 05:57

Air Toxics by EPA Compendium Method TO-15

<u>Analyte</u>	<u>Results</u>		<u>Flag</u>	<u>MDL</u>
	<u>ppbv</u>	<u>ug/m³</u>		<u>ppbv</u>
Ethylene oxide	0.0490	0.09		0.0453

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FILE #: 0344.00

REPORTED: 02/25/19 07:54

SUBMITTED: 02/14/19

AQS SITE CODE:

SITE CODE: EtO Region 5

Description: Water Tower

Lab ID: 9021401-06

Sampled: 02/12/19 09:40

Pressure @ Receipt: 3.50" Hg

Canister #: 061

Received: 02/14/19 11:08

Comments: Probe # 10312 Start 10:04 2/11/19

Analyzed: 02/20/19 06:59

Air Toxics by EPA Compendium Method TO-15

<u>Analyte</u>	<u>Results</u>		<u>Flag</u>	<u>MDL</u>
	<u>ppbv</u>	<u>ug/m³</u>		<u>ppbv</u>
Ethylene oxide	ND	ND	U	0.0453

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FILE #: 0344.00

REPORTED: 02/25/19 07:54

SUBMITTED: 02/14/19

AQS SITE CODE:

SITE CODE: EtO Region 5

Description: West Neighborhood

Lab ID: 9021401-07

Sampled: 02/12/19 10:06

Pressure @ Receipt: 4.50" Hg

Canister #: 171

Received: 02/14/19 11:08

Comments: Probe # 10310 Start 10:48 2/11/19

Analyzed: 02/20/19 07:59

Air Toxics by EPA Compendium Method TO-15

<u>Analyte</u>	<u>Results</u>		<u>Flag</u>	<u>MDL</u>
	<u>ppbv</u>	<u>ug/m³</u>		<u>ppbv</u>
Ethylene oxide	0.728	1.31		0.0453

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FILE #: 0344.00

REPORTED: 02/25/19 07:54

SUBMITTED: 02/14/19

AQS SITE CODE:

SITE CODE: EtO Region 5

Description: Hinsdale South HS

Lab ID: 9021401-08

Sampled: 02/12/19 09:54

Pressure @ Receipt: 4.00" Hg

Canister #: A21119

Received: 02/14/19 11:08

Comments: Probe #10076 Start 10:28 2/11/19

Analyzed: 02/20/19 08:59

Air Toxics by EPA Compendium Method TO-15

<u>Analyte</u>	<u>Results</u>		<u>Flag</u>	<u>MDL</u>
	<u>ppbv</u>	<u>ug/m³</u>		<u>ppbv</u>
Ethylene oxide	0.171	0.31		0.0453



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FILE #: 0344.00

REPORTED: 02/25/19 07:54

SUBMITTED: 02/14/19

AQS SITE CODE:

SITE CODE: EtO Region 5

Description: WB Warehouse

Lab ID: 9021401-09

Sampled: 02/12/19 09:17

Pressure @ Receipt: 2.40" Hg

Canister #: 629

Received: 02/14/19 11:08

Comments: Probe #10314 Start 9:18 2/11/19

Analyzed: 02/20/19 10:01

Air Toxics by EPA Compendium Method TO-15

<u>Analyte</u>	<u>Results</u>		<u>Flag</u>	<u>MDL</u>
	<u>ppbv</u>	<u>ug/m³</u>		<u>ppbv</u>
Ethylene oxide	ND	ND	U	0.0453

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FILE #: 0344.00

REPORTED: 02/25/19 07:54

SUBMITTED: 02/14/19

AQS SITE CODE:

SITE CODE: EtO Region 5

Analyte	Result	Units	Source Result	RPD	RPD Limit	Notes
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Air Toxics by EPA Compendium Method TO-15 - Quality Control

Batch B9B1504 - Summa Canister Prep

Blank (B9B1504-BLK1)

Prepared: 02/14/19 Analyzed: 02/15/19

Ethylene oxide	ND	ppbv				U
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Duplicate (B9B1504-DUP3)

Source: 9021401-03

Prepared: 02/12/19 Analyzed: 02/16/19

Ethylene oxide	2.32	ppbv	2.20	5.38	25	
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Duplicate (B9B1504-DUP4)

Source: 9021401-04

Prepared: 02/12/19 Analyzed: 02/16/19

Ethylene oxide	2.68	ppbv	2.61	2.67	25	
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Batch B9B1907 - Summa Canister Prep

Blank (B9B1907-BLK1)

Prepared: 02/14/19 Analyzed: 02/19/19

Ethylene oxide	ND	ppbv				U
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FILE #: 0344.00

REPORTED: 02/25/19 07:54

SUBMITTED: 02/14/19

AQS SITE CODE:

SITE CODE: EtO Region 5

Analyte	Result	Units	% Difference	Limit (%)	Notes
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Air Toxics by EPA Compendium Method TO-15 - Quality Control

Sequence 1902044

Calibration Check (1902044-CCV1)

Prepared & Analyzed: 02/15/19

Ethylene oxide	2.21	ppbv	-11.4	30.00
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Sequence 1902049

Calibration Check (1902049-CCV1)

Prepared & Analyzed: 02/19/19

Ethylene oxide	2.30	ppbv	-7.9	30.00
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FILE #: 0344.00

REPORTED: 02/25/19 07:54

SUBMITTED: 02/14/19

AQS SITE CODE:

SITE CODE: EtO Region 5

Notes and Definitions

U	Under Detection Limit
LK	Analyte identified; Reported value may be biased high.
ND	Analyte NOT DETECTED
NR	Not Reported
MDL	Method Detection Limit
RPD	Relative Percent Difference

Note: The test results meet all requirements of NELAC; however the following analytes are not accredited: 1,2,4-trimethylbenzene, 1,2-dibromoethane, 1,2-dichloropropane, 1,3,5-trimethylbenzene, 1,3-butadiene, acetylene, acrolein, bromochloromethane, bromodichloromethane, bromoform, carbon disulfide, dibromochloromethane, dichlorodifluoromethane, dichlorotetrafluoroethane, ethyl acrylate, ethyl tert butyl ether, ethylene oxide, hexachloro-1,3-butadiene, octane, propylene, tert amyl methyl ether, tetrachloroethylene, trans-1,2-dichloroethylene, trichlorofluoromethane, and trichlorotrifluoroethane.